UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,643	10/29/1999	EDMUND COLBY MUNGER	00479.84602	6165

7590   06/16/2003

BANNER & WITCOFF LTD
1001 G ST NW
11TH FLOOR
WASHINGTON, DC 200014597

EXAMINER
CHOUDHARY, ANITA

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 06/16/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/429,643	MUNGER ET AL.
	Examiner	Art Unit
	Anita Choudhary	2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>21 March 2003</u> .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-84</u> is/are pending in the application.

4a) Of the above claim(s) <u>54-67 and 71-84</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-53 and 68-70</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>08 March 2000</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

Claim to priority to provisional applications 60/106261 and 60/137704 have been made

in this application.

The earliest effective filing date for the subject matter defined in the pending claims in

the application is October 30, 1998.

Election/Restrictions

Applicant's election without traverse of Group 1 (claims 1-53 and 68-70) in Paper No. 15

is acknowledged.

Claim 54-67 and 71-84 withdrawn from further consideration pursuant to 37 CFR

1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking

claim. Election was made **without** traverse in Paper No. 15.

Claims 1-53 and 68-70 are examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 5, 7-12, 19, 23, 26, 27, 29-34, 41, 45, and 49 are rejected under 35

U.S.C. 102(e) as being anticipated by Bluemenau (6,263,445).

In referring to claim 1, 23, and 45 Bluemenau shows a system for managing access from a first computer to a second computer being a storage system including a glister which identifies host processors that have access to each of the resources at the storage system (see abstract). Bluemenau shows:

Embedding in each of a plurality of data packets a discriminatory value (random number 64) that periodically changes between successive data packets, wherein each value is not based on the value of other data in each packet (col. 12 lines 51-65).

Transmitting in the plurality of data packets between the first computer and the second computer (312 and 320) (col. 13 lines 11-19).

Receiving the transmitted packet, comparing the value to a set of valid values and, in response to detected match, accepting the received data packet for further processing and otherwise rejecting the received data packet (col. 13 lines 20-57).

In referring to claim 4 and 26, Bluemenau shows changing value external to IP header of each packet (fig. 2, col. 13 lines 16-20).

In referring to claim 5 and 27, Bluemenau shows steps 1 and 4 performed at data link layer (col. 13 lines 20-32).

In referring to claim 7, 29, and 49, Bluemenau shows different discriminatory value for each successive packet (col. 13 lines 38-44).

In referring to claim 8, 30, and 46, Bluemenau shows comparing value to a window of valid values, wherein the window is wide enough to permit comparison of only one of the potentially valid values (expected random number) and further the step of moving the window as successive data packets are received (fig. 9, 89c) (col. 13 lines 25-36).

In referring to claim 9 and 31, Bluemenau shows step for sharing between the first computer and second computer information sufficient to generate the set of valid discriminator values (col. 13 lines 32-36).

In referring to claim 10 and 32, Bluemenau shows transmitting an algorithm (access key) for selecting successively valid discriminatory values (col. 13 lines 11-19).

In referring to claim 11 and 33, Bluemenau shows step for using a presence vector to determine whether to accept each data packet (col. 5 lines 55-64).

In referring to claim 12 and 34, Bluemenau shows using hashing function to determine whether the discriminatory value is valid (col. 14 lines 25-51).

In referring to claim 19 and 41, Bluemenau shows transmit tables (64 and 82) at first and second computers (312 and 320) comprising a list of valid values that are to be inserted into outgoing data packets (col. 10 lines 9-44),

Receive table comprises a list of valid values that are to be compared against incoming data packets (86 and 60).

Wherein the tables in the respective computers match (86 and 349, col. 13 lines 20-37).

Claims 20 and 42 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Rochberger et al (6,061,736).

Rochberger shows a system of plurality of computers connected to each other through physical transmission paths. Rochberger shows the steps for:

Randomly selecting one of a plurality of physical transmission paths through the plurality of computers and randomly transmitting each data packet over the randomly selected path (see abstract, col. 2 lines 41-59, col. 4 lines 1-10).

Claims 50-53 and 68-70 are rejected under 35 U.S.C. 102(e) as being anticipated by Shannon (6,233,618).

In referring to claim 50 and 68, Shannon shows an access control of data on a network. Shannon discloses:

- o A receiving computer (network device 100) that receives data packets from a transmitting computer (client) executing the steps for:

- o Extracting a discriminatory value inserted by the transmitting computer and comparing the extracted value to a set of valid discriminatory values on the basis of information previously shared with the transmitted computer (database information) (col. 13 lines 34-51).

- o In response to a detected match, accepting the received data packet for further processing and otherwise rejecting the data packet (col. 13 lines 52-65).

In referring to claim 51 and 69, extracting as the discriminatory value an IP address from the header portion of the data packet (fig. 3, col. 13 lines 37-51).

In referring to claim 52, receiving computer maintains a window (table at the database) of valid values, wherein the window is moved (moves to table 2) in response to detecting matches.

In referring to claim 53 and 70, receiving computer receives information from the

transmitting computer sufficient to establish the set of valid discriminatory values (col. 6 lines

28-47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 2, 3, 6, 17, 18, 24, 25, 28, 39, 40, 47, and 48 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Bluemenau in view of Shannon et al (6,233,618).

In referring to claim 2, 24, and 47, Bluemenau shows substantial features of the claimed

invention by does not show the discriminatory value being IP address. Nonetheless this feature

is well known in the art, and would have been an obvious modification to the system disclosed

by Bluemenau, as evidenced by Shannon.

Shannon shows a system for controlling access to networked data. Shannon shows:

An IP address in an IP header as the value, wherein the IP address is used to route the

data packet over the Internet (fig. 3 col. 13 lines 19-65).

Given this feature, a person of ordinary skill in the art would have readily recognized the

desirability and advantages of modifying the system disclosed by Bluemenau to employ the

feature shown by Shannon, in order to allow access based not on content but on identity of

computer or users making the request (see abstract).

In referring to claim 6, 28, and 48, Shannon shows MAC address as value (col. 13 lines

52-65).

In referring to claim 3, 17, 18, 25, 39 and 40, Shannon shows a discriminatory value

having two parts, first part being IP source address and second part as destination IP address,

wherein the source and destination are used to route the packet (col. 13 line 52- col. 14 line 15).

Claims 13-16 and 35-38 rejected under 35 U.S.C. 103(a) as being unpatentable over

Bluemenau in view of Boebert et al (5,276,735).

In referring to claim 13 –16 and 35-38, Although Bluemenau show substantial features of

the claimed invention, he does not show synchronization request. Nonetheless this feature is well

known in the art, and would have been an obvious modification to the system disclosed by

Bluemenau as evidenced by Boebert.

In an analogous art, Boebert shows am method for providing secure data transfer and

sharing on a network. Boebert shows:

Transmitting synchronization request to maintain synchronization of values (keys) (col.

27 lines 50- col. 28 lines 15).

If synchronization fails, shutting off transmission of packets (col. 30 lines 60-63).

Embedding synchronization in data packets that permits a second computer to re-

establish synchronization (col. 31 lines 10-20).

Moving a window of valid values in a second computer in response to receiving the

synchronization request from first computer (col. 29 lines 44-48).

Given this feature, a person of ordinary skill in the art would have readily recognized the

desirability and advantages of modifying the system disclosed by Bluemenau in order to employ

the features shown by Boebert, in order to prevent errors due to timing inefficiencies in the

network.

Claims 21, 22, 43, and 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rochberger in view of Mayes et al (6,510,154).

Although Rochberger shows substantial features of the claimed invention, Rochberger

does not show inserting valid source and destination address in to the packet. Nonetheless this

feature is well known in the art, and would have been an obvious modification to the system

disclosed by Rochberger as evidenced by Mayes.

In analogous art, Mayes shows a system for providing translation of local IP address to

globally unique IP address. Mayes shows selecting and inserting in a packet, a valid destination

and source address associated with a selected path (col. 6 lines 16-49).

Given this feature, a person of ordinary skill in the art would have readily recognized the

desirability and advantages of modifying the system shown by Rochberger to employ the feature

shown by Mayes, in order to employ commonly used data forwarding method using network

address translation (col. 4 line 35-36).

In referring to claim 22 and 44, Rochberger shows avoiding selection of path that is not

operational (col. 1 lines 59-61).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

AC
June 6, 2003

GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100